

IN THE CLAIMS

The text of all claims under examination is submitted, and the status of each is identified. This listing of claims replaces all prior versions, and listings, of claims in the application.

1. (currently amended): A process of preparing water soluble or water swellable polymer comprising the steps,

(a) forming an aqueous mixture comprising,

(i) a water soluble ethylenically unsaturated monomer or blend of monomers and,

(ii) an ultra violet initiator,

(b) effecting polymerisation by subjecting the aqueous mixture formed in step (a) to polymerisation conditions to form a polymer of said monomer or monomer blend, wherein ultra violet initiator is distributed throughout the polymer,

(c) subjecting the polymer formed in step (b) to ultra violet light radiation,

characterised in that the polymerisation step (b) is conducted substantially in the absence of ultra violet radiation and the formed polymer in step (b) is not subjected to a comminuting step.

2. (original): A process according to claim 1 in which the polymerisation step (b) is effected by suitable polymerisation initiators, selected from the group consisting of redox initiators and thermal initiators.

3. (previously presented): A process according to claim 1 in which the polymer in step (c) is subjected to ultraviolet light radiation at an intensity of up to 500 milliWatts/cm².

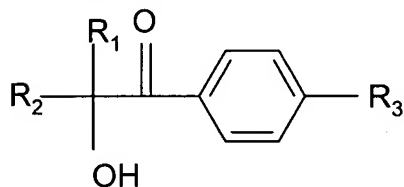
4 (previously presented): A process according to claim 1 in which the polymer is formed from acrylamide.

5. (previously presented): A process according to claim 1 in which the polymer has an intrinsic viscosity of at least 4 dl/g.

6. (previously presented): A process according to claim 1 in which the polymer formed by solution polymerisation.

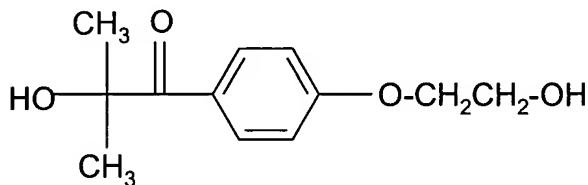
7. (previously presented): A process according to claim 1 in which the ultra violet initiator is soluble or dispersible in the aqueous monomer or monomer blend.

8. (previously presented): A process according to claim 1 in which the ultra violet initiator is a compound of formula:

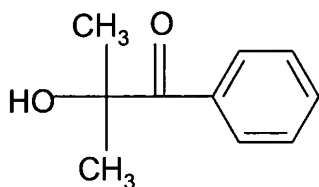


wherein R₁ and R₂ are each independently C₁₋₃ alkyl or together form a C₄₋₈ cycloaliphatic ring, R₃ is H, C₁₋₂ alkyl or -O(CH₂CH₂)_nOH and n is 1-20.

9. (original): A process according to claim 8 in which the ultra violet initiator is a compound of formula:



10. (original): A process according to claim 8 in which the ultra violet initiator is a compound of formula:



11. (previously presented): A process according to claim 1 in which step (c) is conducted simultaneous with a drying stage.

12-16. (cancelled).

17. (currently amended): A process of preparing water soluble or water swellable polymer comprising the steps,

(a) forming an aqueous mixture comprising,
 (i) a water soluble ethylenically unsaturated monomer or blend of monomers and,
 (ii) an ultra violet initiator,
(b) effecting polymerisation by subjecting the aqueous mixture formed in step (a) to polymerisation conditions to form a polymer of said monomer or monomer blend,
(c) subjecting the polymer formed in step (b) to ultra violet light radiation at an intensity of up to 500 milli Watts/cm²,
characterised in that the polymerisation step (b) is conducted substantially in the absence of ultra violet radiation and the formed polymer in step (b) is not subjected to a comminuting step.

18. (previously presented): A process according to claim 17 in which the ultra violet light radiation is at an intensity of up to 50 milli Watts/cm².

19-20. (cancelled).

21. (previously presented): A process according to claim 1 in which the polymer is polymerized by reverse phase polymerization, in which an aqueous solution of monomer is suspended in a water immiscible liquid and polymerized to form polymeric beads; or by emulsifying aqueous monomer into an organic liquid and then effecting emulsion polymerization.